Student ID

Course Code

a) Report

Introduction

Introduction & Definition of Type 2 Diabetes

Type 2 diabetes (T2DM) is a chronic metabolic disorder that is due to insulin resistance and poor glucose metabolism (Accili, Deng and Liu, 2025). It is linked to many complications such as heart disease, kidney failure and neuropathy, thus a leading public health concern (Usman, Khan and Butler, 2021). Complex daily self-management is required in the management of T2DM, including monitoring of the blood glucose level, taking the prescribed medications and making lifestyle changes. This activity can lead to even more emotional suffering of the patients, so healthcare practitioners must think about a global approach, i.e., a combination of physical and emotional treatment of the patients.

In T2DM, interpersonal communication plays an extremely important role, particularly between a care provider and a patient. Significant aspects of communication are important qualities in providing care since they allow patients to express their interests and preferences in care, and their knowledge of their condition is incorporated in the care plans. Client-focused type of communication can also be classified as an important issue in diabetes care, where the desires and interests of the patients can be put into the mind of the communication with patients (Kirk et al., 2023). The approach can assist in increasing patient adherence, adherence to treatment, and health outcomes.

In the attempt to manage T2DM, especially among the most vulnerable groups, the study tries to emphasise the concept of good communication habits to curb it. The other issue that the study answers is whether alteration of already established programs, like the Diabetes Prevention

Program (DPP), or development of new communication strategies can be made that are easier to approach these populations. During this study, the focus will be on primary care providers, diabetologists, and people who study the problem of public health with the purpose of enhancing the current communication system and making it full and efficient in the treatment of T2DM.

The research notes that systematic communication strategies are essential and must overcome the barriers that may affect effective patient-provider communication, including health literacy and socioeconomic context.

Discussion of Communication Methods

Communication is also important in healthcare to develop understanding and patient participation in the management of type 2 diabetes. It requires verbal communication, like a clear and empathetic language. The tone, voice, pitch and speed of the speech play an important role in ensuring that the message is not only heard but it is also understood (Rehman and Sohail, 2023). A friendly, relaxed tone reminds patients that healthcare practitioners accept them, and it is best to talk; a brush or rush approach may also cause misunderstandings or a sense of being insignificant.

The other forms of communication that are also important are non-verbal communication through gestures, looks and body language (Grillo and Enesi, 2022). Such as eye contact makes one appear attentive, respectful, and enables patients to feel recognised. A warm smile or open posture can make anxiety levels weaker and create trust for patients.

Understanding body language and personal space is vital for ensuring comfort during consultations. A healthcare professional should be mindful of personal space to avoid making patients feel overwhelmed or

uncomfortable (Murphy and Angelow, 2022). Additionally, non-verbal cues can sometimes reveal a patient's emotional state, which may not be expressed verbally. Therefore, being observant of these signals helps in providing more personalised care. Effective communication in managing T2D involves a combination of clear verbal exchanges and the supportive use of non-verbal cues (Meshack, 2023), helping to build rapport and ensuring that patients feel both informed and understood.

Impact of T2D on Communication in Healthcare

T2D significantly impacts communication in healthcare, primarily due to the continuous need for monitoring, patient education, and regular treatment adjustments. The global prevalence of T2D is nearly 9%, with 90% of diabetes patients affected by this form, and the prevalence is expected to rise (Standl et al., 2019). In 2020, 34 million Americans were living with diabetes, and 1 in 4 people with diabetes were unable to achieve an HbA1c level of less than 7.5%, which is critical for managing diabetes effectively (Klein and Buse, 2020). Furthermore, less than 21% of adults met the recommended target of an HbA1c level below 7%, putting them at higher risk for short- and long-term complications, including premature mortality (Idrees et al., 2022).

The effective control over T2D is complicated by such aspects of communication as care multifacets, 24-hour concerned observation, and individual advice. The resulting issues are made worse by the disparities in access to healthcare, especially for racial/ethnic minorities and those of lower socioeconomic status. The socioeconomically poorest people are 2.5 times more likely to develop diabetes, and the black and minority ethnic groups are up to six times more susceptible (Majid et al., 2020). These populations experience challenges in their use of technologies such as

continuous glucose monitoring (CGM), which has been shown to lower the level of HbA1c (Lai et al., 2023). Further, telemedicine has become a necessity, particularly during the pandemic, which allowed holding remote consultations and monitoring, especially in underserved populations (George and George, 2023). It is estimated that the cost of diabetes management in the world would increase to $2.5 trillion by 2030, compared to $1.3 trillion in 2015, and this is a reason why a specific communication process is necessary to deal with these disparities (Breuing et al., 2019).

Impact of T2D on the Individual's Ability to Communicate

Type 2 diabetes can significantly impact an individual's ability to communicate in both negative and positive ways. On the negative side, the physical and cognitive effects of diabetes can impair speech and the ability to use gestures (Gravell, 2024). Neuropathy, often caused by high blood sugar levels, can lead to numbness and weakness in the hands and mouth, affecting an individual's ability to articulate words or perform gestures (Pop-Busui et al., 2022). There are further complications, such as diabetic retinopathy, which may affect vision and may prevent people from reading or interpreting non-verbal languages, further affecting communication (Klauke, Sondocie and Fine, 2022; Dar et al., 2023). The presence of long-term diabetes can induce a cognitive decline that affects memory and verbal information processing, which causes conversation and understanding difficulties (Aderinto et al., 2023). Chronic illness is often associated with emotional distress, anxiety and depression, which in turn can have an impact on communication, where people will withdraw or avoid talking (Van Wilder et al., 2021).

Furtherly, technology has been crucial in helping persons with T2D in communication. Mobile apps and telemedicine platforms are considered

digital health tools that enable patients to improve communication with healthcare providers by removing physical and geographical barriers (Alawiye, 2024). These technologies can track in real-time, provide pill reminders, and make virtual handling, improving interactions with medical workers. In addition, the person can be provided with help in case of verbal communication difficulty, as the assistive technology should include speech-to-text applications to enable communication with caregivers and other medical teams (Sezgin et al., 2022).

HCA's Role in Facilitating Communication

The role of Healthcare Assistants (HCAs) is a critical role to facilitate communication with patients with type 2 diabetes, especially where they have difficulties, e.g., amnesia, aphasia, dementia, or sensory impairment (Rawles, 2019). Patients with anomia or aphasia require the assistance of HCAs using simple, clear language, visual and written help to better understand. With dementia patients, HCAs are advised to offer a relaxed and steady conversation, offering language and familiar communication signs to enable the patients to associate with the information. In case patients either have vision problems or hearing ones, the HCAs must observe proper care and make use of visual or physical indications such as large print or sign language, as well as place sufficient hearing aids on the table.

Technology is an important component of enabling communication as well, such as tablets, applications, or telehealth services, which enable effective HCAs communications, especially in cases where HCAs use remote consultations (Olawade et al., 2024). Such gadgets can provide feedback and reminders in real-time, like medication changes, diet changes and lifestyle changes. The choice of methods of communication, as well,

requires consideration of the environmental and social factors by HCAs. A peaceful, bright place with minimal surroundings improves the chances of patients listening and participating in the discussion. The background of the patient and his/her supporting system in terms of social factors is similarly relevant in modifying the communication strategy used for treatment. Since patients with diabetes are highly sensitive to these aspects, by learning to adapt to them, HCAs will be able to develop trust and create an environment where these patients feel understood and heard.

Recommendations to Improve Communication in the Workplace

In the healthcare setting, two main suggestions to enhance effective communication in managing type 2 diabetes patients are the integration of technology-based communication and offering specialised training on adaptive communication techniques to healthcare assistants (HCAs). The first suggestion would be to implement combined digital communication tools for patients and healthcare teams (Jensen et al., 2024). These systems might comprise secure messaging, patient portal, etc, where patients can communicate, schedule appointments, remind medications, etc, in real-time. Such tools will be of great use to patients with sensory disabilities or who have issues articulating as a result of aphasia or dementia. Indicators, including speech-to-text, display, or simple interfaces, could enhance dialogue in case a face-to-face connection is ineffective. Besides, the use of these platforms allows healthcare providers, such as HCAs, to provide continuous, regular support, which is critical in the treatment of type 2 diabetes and patient engagement.

The second suggestion is to engage HCAs in specialised training on adaptive communication strategies that would be specific to the needs of type 2 diabetes patients (Yao et al., 2021). The training should include

teaching on effective communication with the registered nurse in contact with patients with anomia, aphasia, dementia, or sensory defects such as hearing and vision loss. The basic concepts of simple language, use of non-verbal communication like use of gestures and facial features and the variety of ways of communication should be highlighted during the training. Role-playing practice could help HCAs develop empathy to understand the challenges experienced by patients. The strategy will also assist the HCAs in being ready to deliver effective communication outcomes and establish emotional associations with patients, and improve the quality of care that patients with T2D receive.

Impact of HCA's understanding of Communication on Patient Care

The study noted the importance of HCAs in mediating between healthcare providers and patients, who acted as a communication gap. Their communication training guarantees that patients are not only informed about the medical issue but also feel confident about handling their condition. Further, good HCAs' skills in communicating result in increased patient satisfaction, health outcomes, and cohesiveness of the healthcare team. Effective communication between the HCAs and patients helps to improve the overall experience of care delivery and chronic condition management, such as diabetes (Roberts et al., 2019).

Evidence of Communication for T2D Management

Communication strategies for managing T2D have been greatly improved by technology, enhancing patient engagement and management. Mobile health applications (mHealth) enable real-time tracking of glucose levels, medication adherence, and education as well as uninterrupted contact between healthcare providers and patients, which enhances self-management and decreases HbA1c levels (Guo et al., 2021). Telemedicine

facilitates both distant medical consultation and frequent monitoring, overcoming the risks brought about by distance and placing the care process on a more regular basis (Su et al., 2022). In addition, continuous glucose monitors (CGMs) are designed to measure changes in real time, so healthcare professionals and patients can make fast changes to treatment plans (Karter et al., 2021). A combination of CGMs and mobile apps enhances communication further, as they can easily share the data. Such technologies encourage customised care, improve patient participation, and eventually achieve effective diabetes management and health improvement.

Conclusion

In conclusion, a good understanding of communication within the health sector and especially that of Healthcare Assistants (HCAs) leads to major improvement of patient care, especially with patients with chronic illnesses such as diabetes. Communication is crucial in clarifying the diagnosis to patients, how they can be treated, and changes they have to adopt in their lifestyle. HCAs with a good knowledge of communication strategies may establish an inclusive environment in which patients feel supported and heard, respected, with the ability to assert control over their health outcomes. Based on my findings, it was evident that effective utilisation of both the verbal and non-verbal communication strategies by HCAs, including active listening, empathetic response, and explicit actions, significantly contributes to patient compliance with the treatment regimen, their awareness of self-care, and emotional status. This, in turn, leads to the improved management of diabetes as complications decrease and quality of life increases.

b) Memorandum

To: Healthcare Assistants (HCAs) and Primary Care Staff
From: [Name], [Job Title]
Subject: Upcoming Meeting on Enhancing Communication Strategies in Type 2 Diabetes Care
Date: 2 July 2025

Purpose of the Memo:
You are invited to attend another healthcare team session aimed at enhancing communication strategies in working with patients who experience Type 2 Diabetes Mellitus (T2DM). As has been noted in our latest report, patient-healthcare communication is one of the key factors in diabetes management and patient outcomes.

Meeting Agenda Outcomes:

- How does communication style (verbal and non-verbal) affect the understanding of the patients and their engagement?
- Examine obstacles to successful communication, such as poor health, low socioeconomic and cognitive or sensory impairment.
- Discover the possibilities of technology (e.g. telemedicine, mobile apps, CGMs) transforming communication with diabetes care.
- Describe the HCA in the position of assisting patients with such conditions as dementia or vision and hearing problems.
- Present two recommendations on how to improve work in the workplace:
- Integrating the use of electronic communication devices to support patient-oriented interventions.

- Offering special communication training along with T2DM support.

Meeting Details:
Date: 10th July, 2025
Time: 5 pm (GMT+1)
Venue: online Zoom meeting https://www.zoom.com/

Your involvement is highly valued and appreciated, whilst we all work together and enhance our communication behaviours and offer patient-centred care. I would also ask you to prepare any experience you have on the handling of T2DM patients.

I am thrilled with a good discussion on how we can serve our patients more efficiently by having more effective communications. I am looking forward to seeing you at the meeting.

c) Letter

2 July 2025

NHS England London, 10 South Colonnade, Poplar, London, E14 4PU

england.contactus@nhs.net

Dear Sir William,

I am contacting you as I want to find out about the diabetes care services and communication plans provided at your residential care home to patients with Type 2 Diabetes Mellitus (T2DM). The technique with which your facility assists its residents to cope with T2DM is something that I would like to know because it is the same issue that I focus on in my healthcare research project currently, i.e., communication-enhancing diabetes management. Particularly, I would be happy to learn about the following domains:

- The type of communication that is used between healthcare assistants and diabetic residents (e.g., verbal, non-verbal or assistive technology).
- The way your facility deals with patients who have communication problems that can be caused by diseases like dementia, aphasia, or hearing and vision problems.
- Whether your employees are trained in any special communication strategies for diabetes care.
- Engagement of residents and education through the use of technology, e.g. telemedicine or glucose-monitoring apps.

- Any health literacy improvement or communication barrier work, currently in progress.

Your views would assist in the realisation of good practices in residential homes and the provision of comprehensive care to patients. I would also like to have any brochures, policy papers or even an interview with a staff member in trying to understand more about T2D.

Thank you for your assistance and time. I am looking forward to your response.

Yours sincerely,

[Name]

d) E-mail

To: healthcaretutor@chevrontraining.ie
Subject: Inquiry Regarding AI in Healthcare Module

Dear Healthcare Tutor,

I hope this email finds you well. I am in a current healthcare module and deeply interested in learning more about the role of digital health technologies, especially Artificial Intelligence (AI), that are changing the way chronic diseases are managed. Within the past few days, I came across a scientific review of the problem of Artificial Intelligence in Diabetes Management (Advancements, Opportunities, and Challenges) (available as the attachment to this mail), and I would like to know whether this course will address the aspect of AI in healthcare and the issue of Type 2 Diabetes management.

The research review makes the point that AI has an opportunity to enhance personalisation of prediction, diagnosis, and treatment using instruments such as continuous glucose monitoring (CGM), digital decision-support systems, and smart dietary monitoring apps. Such technologies are found particularly useful in underserved areas and with patients who incur precision care needs. Due to the current global epidemic of diabetes and the integration of AI-based health systems, I think that gaining an understanding of such apps would contribute immensely to our knowledge of health practices that are ready to become future-proof. I should therefore be pleased to be informed:

- Is there any AI-enabled diabetes content that will be found in this module or a future pathway at Level 6?
- Will there be any upcoming workshops or placements which discuss AI in clinical or community practice?

- Could we include at least some brief project or presentation on this subject as a part of our coursework?

Thank you for your time and consideration. I look forward to your guidance and any opportunities to engage further with this emerging area.

Kind regards,
[Name]
[Student ID]
[Contact Email]

References

Accili, D., Deng, Z. and Liu, Q. (2025). Insulin resistance in type 2 diabetes mellitus. *Nature reviews. Endocrinology*, [online] pp.10.1038/s41574-02501114-y. doi:https://doi.org/10.1038/s41574-025-01114-y.

Aderinto, N., Olatunji, G., Abdulbasit, M., Ashinze, P., Faturoti, O., Ajagbe, A., Ukoaka, B. and Aboderin, G. (2023). The impact of diabetes in cognitive impairment: A review of current evidence and prospects for future investigations. *Medicine*, [online] 102(43), p.e35557. doi:https://doi.org/10.1097/MD.0000000000035557.

Alawiye, T.R. (2024). The Impact of Digital Technology on Healthcare Delivery and Patient Outcomes. *E-Health Telecommunication Systems and Networks*, 13(02), pp.13–22. doi:https://doi.org/10.4236/etsn.2024.132002.

Breuing, J., Graf, C., Neuhaus, A.L., Heß, S., Lütkemeier, L., Haas, F., Spiller, M. and Pieper, D. (2019). Communication strategies in the prevention of type 2 and gestational diabetes in vulnerable groups: protocol for a scoping review. *Systematic Reviews*, 8(1). doi:https://doi.org/10.1186/s13643-019-1021-9.

Dar, M.A., Maqbool, M., Ara, I. and Qadrie, Z. (2023). Preserving sight: Managing and preventing diabetic retinopathy. *Open Health*, 4(1). doi:https://doi.org/10.1515/ohe-2023-0019.

George, D.A.S. and George, A.S.H. (2023). Telemedicine: A New Way to Provide Healthcare. *Partners Universal International Innovation Journal*, [online] 1(3), pp.98–129. doi:https://doi.org/10.5281/zenodo.8075850.

Gravell, R. (2024). *Communication Problems in Elderly People*. [online] Google Books. Available at: https://books.google.com/books?

hl=en&lr=&id=R2z8EAAAQBAJ&oi=fnd&pg=PT8&dq=On+the+negative+side [Accessed 2 Jul. 2025].

Grillo, H.M. and Enesi, M. (2022). Impact, importance, types, and use of non-verbal communication in social relations. *Linguistics and Culture Review*, 6(S3), pp.291–307. doi:https://doi.org/10.21744/lingcure.v6ns3.2161.

Guo, M., Meng, F., Guo, Q., Bai, T., Hong, Y., Song, F. and Ma, Y. (2021). Effectiveness of mHealth management with an implantable glucose sensor and a mobile application among Chinese adults with type 2 diabetes. *Journal of Telemedicine and Telecare*, 29(8), p.1357633X2110202. doi:https://doi.org/10.1177/1357633x211020261.

Idrees, T., Castro-Revoredo, I.A., Migdal, A.L., Moreno, E.M. and Umpierrez, G.E. (2022). Update on the management of diabetes in long-term care facilities. *BMJ Open Diabetes Research and Care*, [online] 10(4), p.e002705. doi:https://doi.org/10.1136/bmjdrc-2021-002705.

Jensen, L.W.H., Rahbek, O., Lauritsen, R.E.K., Kold, S. and Dinesen, B. (2024). Health Care Professionals' Perspectives Before and After Use of eDialogue for Team-Based Digital Communication Across Settings: Qualitative Study. *JMIR Human Factors*, [online] 11(1), p.e53391. doi:https://doi.org/10.2196/53391.

Karter, A.J., Parker, M.M., Moffet, H.H., Gilliam, L.K. and Dlott, R. (2021). Association of Real-time Continuous Glucose Monitoring With Glycemic Control and Acute Metabolic Events Among Patients With Insulin-Treated Diabetes. *JAMA*, 325(22). doi:https://doi.org/10.1001/jama.2021.6530.

Kirk, B.O., Khan, R., Davidov, D., Sambamoorthi, U. and Misra, R. (2023). Exploring facilitators and barriers to patient-provider communication

regarding diabetes self-management. *PEC Innovation*, [online] 3, p.100188. doi:https://doi.org/10.1016/j.pecinn.2023.100188.

Klauke, S., Sondocie, C. and Fine, I. (2022). The impact of low vision on social function: The potential importance of lost visual social cues. *Journal of Optometry*, [online] 16(1), pp.3–11. doi:https://doi.org/10.1016/j.optom.2022.03.003.

Klein, K.R. and Buse, J.B. (2020). The trials and tribulations of determining HbA1c targets for diabetes mellitus. *Nature Reviews Endocrinology*, [online] 16(12), pp.717–730. doi:https://doi.org/10.1038/s41574-020-00425-6.

Lai, M., Weng, J., Yang, J., Gong, Y., Fang, F., Li, N., Kang, M., Xu, X. and Wang, Y. (2023). Effect of continuous glucose monitoring compared with self-monitoring of blood glucose in gestational diabetes patients with HbA1c<6%: a randomized controlled trial. *Frontiers in Endocrinology*, 14. doi:https://doi.org/10.3389/fendo.2023.1174239.

Majid, Z., Welch, C., Davies, J. and Jackson, T. (2020). Global frailty: The role of ethnicity, migration and socioeconomic factors. *Maturitas*, 139, pp.33–41. doi:https://doi.org/10.1016/j.maturitas.2020.05.010.

Meshack, G. (2023). Healthcare Provider Patient Communication on Diabetes Mellitus Management Practices in Selected Hospitals in Kenya. *Jkuat.ac.ke*. [online] doi:http://localhost/xmlui/handle/123456789/6154.

Murphy, J. and Angelow, A. (2022). Being present for you and your patients: Simple strategies for everyday mindfulness. *Journal of Interprofessional Education & Practice*, 29, p.100555. doi:https://doi.org/10.1016/j.xjep.2022.100555.

Olawade, A.C.D., Olawade, D.B., Ojo, I.O., Famujimi, M.E., Olawumi, T.T. and Esan, D.T. (2024). Nursing in the Digital Age: Harnessing telemedicine

for enhanced patient care. *Informatics and Health*, [online] 1(2), pp.100–110. doi:https://doi.org/10.1016/j.infoh.2024.07.003.

Pop-Busui, R., Ang, L., Boulton, A., Feldman, E., Marcus, R., Mizokami-Stout, K., Singleton, J.R. and Ziegler, D. (2022). Diagnosis and Treatment of Painful Diabetic Peripheral Neuropathy. *ADA Clinical Compendia*, [online] 2022(1), pp.1–32. doi:https://doi.org/10.2337/db2022-01.

Rawles, Z. (2019). *Essential Knowledge and Skills for Healthcare Assistants and Assistant Practitioners*. Routledge. doi:https://doi.org/10.4324/9781315106755.

Rehman, U. and Sohail, A. (2023). Exploring The Role of Verbal and Non-Verbal Communication Skills of Nursing in Patients Healing. *Research Square (Research Square)*, 1(1). doi:https://doi.org/10.21203/rs.3.rs-3376906/v1.

Roberts, S., Eaton, S., Finch, T., Lewis-Barned, N., Lhussier, M., Oliver, L., Rapley, T. and Temple-Scott, D. (2019). The Year of Care approach: developing a model and delivery programme for care and support planning in long term conditions within general practice. *BMC Family Practice*, [online] 20(1). doi:https://doi.org/10.1186/s12875-019-1042-4.

Sezgin, E., Oiler, B., Abbott, B., Noritz, G. and Huang, Y. (2022). 'Hey Siri, Help Me Take Care of My Child': A Feasibility Study With Caregivers of Children With Special Healthcare Needs Using Voice Interaction and Automatic Speech Recognition in Remote Care Management. *Frontiers in Public Health*, 10. doi:https://doi.org/10.3389/fpubh.2022.849322.

Standl, E., Khunti, K., Hansen, T.B. and Schnell, O. (2019). The global epidemics of diabetes in the 21st century: Current situation and perspectives. *European Journal of Preventive Cardiology*, 26(2_suppl), pp.7–14. doi:https://doi.org/10.1177/2047487319881021.

Su, Z., Li, C., Fu, H., Wang, L., Wu, M. and Feng, X. (2022). Review of the development and prospect of telemedicine. *Intelligent Medicine*, 4(1). doi:https://doi.org/10.1016/j.imed.2022.10.004.

Usman, M.S., Khan, M.S. and Butler, J. (2021). The Interplay Between Diabetes, Cardiovascular Disease, and Kidney Disease. *ADA Clinical Compendia*, 2021(1), pp.13–18. doi:https://doi.org/10.2337/db20211-13.

Van Wilder, L., Pype, P., Mertens, F., Rammant, E., Clays, E., Devleesschauwer, B., Boeckxstaens, P. and De Smedt, D. (2021). Living with a chronic disease: Insights from patients with a low socioeconomic status. *BMC Family Practice*, [online] 22(1). doi:https://doi.org/10.1186/s12875-021-01578-7.

Yao, M., Zhou, X., Xu, Z., Lehman, R., Haroon, S., Jackson, D. and Cheng, K.K. (2021). The impact of training healthcare professionals' communication skills on the clinical care of diabetes and hypertension: a systematic review and meta-analysis. *BMC Family Practice*, [online] 22(1), pp.1–23. doi:https://doi.org/10.1186/s12875-021-01504-x.